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PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-175465

(43)Date of publication of application : 21.06.2002

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(51)Int.Cl. G06F 17/60

G01C 21/00

G06F 17/30

G08G 1/005

H04Q 7/34

H04Q 7/38

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(54) SHOPPING GUIDANCE INFORMATION PROVIDING DEVICE AND ITS  
PROGRAM RECORDING MEDIUM

(57)Abstract:

PROBLEM TO BE SOLVED: To inform the possibility of the purchase of merchandise desired by a user in a store near the place where the user goes out.

SOLUTION: A user is allowed to preliminarily designated and register the information of merchandise which the user wants to purchase from a user portable terminal 5 to a shopping management device 1. The shopping management device 1 acquired the position information of the user portable terminal 5, and when the user approaches a store which sells the merchandise, the shopping management device 1 guides and

notifies the user portable terminal 5 of the information.

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LEGAL STATUS [Date of request for examination]  
[Date of sending the examiner's decision of rejection]  
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]  
[Date of final disposal for application]  
[Patent number]  
[Date of registration]  
[Number of appeal against examiner's decision of rejection]  
[Date of requesting appeal against examiner's decision of rejection]  
[Date of extinction of right]

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**CLAIMS**

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[Claim(s)]

[Claim 1] A store information management means to match and manage the

goods information and the address information on each store which are sold at each store, A goods information registration means by which a user registers the purchase schedule goods which carry out purchase hope, The reference-by-location speciality stage which acquires the currency information of the mobile terminal which this user possesses, It is the store which exists in fixed distance from the terminal location concerned based on the user positional information acquired by this reference-by-location speciality stage, and the address information on said each store. And a store retrieval means to search the store which sells the purchase schedule goods registered by said goods information storage means, Shopping guidance information offer equipment characterized by providing the notice means which gives the guidance notice of that store information to the mobile terminal of the user possession concerned when the store which sells purchase schedule goods near the user with this store retrieval means is searched.

[Claim 2] A store information management means to match and manage the goods information currently sold at each store, and the address information on each store, A goods information registration means by which a user registers the purchase schedule goods which carry out purchase hope, The

reference-by-location speciality stage which acquires the currency information of the mobile terminal which this user possesses, A store retrieval means to search the store which sells the purchase schedule goods registered by said goods information storage means, A distance calculation means to compute the distance to each store on the basis of the terminal location concerned based on the user positional information acquired by said reference-by-location speciality stage, and the address information on each store searched by said store retrieval means, A list creation means to create the guidance information which added the distance information computed according to the store by said distance calculation means to each store information retrieved by said store retrieval means as a store list for a store comparison, Shopping guidance information offer equipment characterized by providing the notice means which gives the guidance notice of the store list created by this list creation means to the mobile terminal of the user possession concerned.

[Claim 3] Said goods information registration means is shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing which receive the goods information on this purchase schedule, and carries out registration management according to a user when the goods information on the

purchase schedule specified as arbitration by said user-terminal side has been transmitted to said information offer equipment from the user terminal concerned, and which was made like.

[Claim 4] As goods information on said purchase schedule, it is shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing with which said store retrieval means searches the store which sells either of said two or more goods contained in the goods genre of the purchase schedule registered, and which was made like when the goods genre is registered.

[Claim 5] It is shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing with which said goods information registration means registers two or more purchase schedule goods specified by a user as a shopping list, and said store retrieval means searches the store which sells the purchase schedule goods of either of the shopping lists registered by said goods information registration means for two or more purchase schedule goods of every, and which made like.

[Claim 6] It is shopping guidance information offer equipment according to claim 1 or 2 carry out the thing which are equipped with said advertising

information-storage means which carries out the storage management of the advertising information transmitted from the terminal by the side of a store, and said notice means also doubles with said advertising information-storage means the advertising information on other stores that advertising information is memorized, and gives a guidance notice in it with the notice of the store information which sells said purchase schedule goods, and which made like as the description.

[Claim 7] Said notice means is shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing which give the guidance notice of the goods information on said purchase schedule currently sold at the store with the store information which sells the purchase schedule goods registered by said goods information storage means, and which was made like.

[Claim 8] Shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing which transmit the privilege service information which shows that preferential treatment sale is possible in case said user purchases the goods of choice at a store to the mobile terminal of the user possession concerned, and which was made like.

[Claim 9] A selling price acquisition means to acquire the selling price of the

goods concerned for every store when the store which sells purchase schedule goods with said store retrieval means is searched, A list creation means to create the guidance information which added the selling price according to store acquired with said selling price acquisition means to each store information retrieved by said store retrieval means as list information for a store comparison, A preparation and said notice means are shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing which notify the list information created by said list creation means, and which was made like.

[Claim 10] It is shopping guidance information offer equipment according to claim 1 or 2 characterized by the thing which have a guidance creation means create guidance from the current position to each store based on the currency information of the user who acquired by said reference-by-location speciality stage, and the address information on each store searched by said store retrieval means, and said notice means doubles and notifies that the guidance information created by said guidance creation means is also, and which made like.

[Claim 11] It has a monitor means to supervise whether the user concerned arrived at the specific location on which it decides beforehand based on the

positional information of the terminal of the acquired user possession. said reference-by-location speciality stage -- \*\* -- When having arrived at the specific location with said monitor means is distinguished, said store retrieval means It is the store which exists in the perimeter of this specific location, and the store which sells the purchase schedule goods registered by said goods information storage means is searched. Said notice means Shopping guidance information offer equipment according to claim 10 characterized by the thing which transmit each store information retrieved by said store retrieval means with said guidance information to the store, and which was made like.

[Claim 12] The goods information which a computer is the record medium which has the program code which can be read, and sells it at each store, The program code which the computer for making the address information on each store match and manage can read, The program code which a computer for a user to make the purchase schedule goods which carry out purchase hope registering can read, The program code which the computer for making the currency information of the mobile terminal which the user possesses acquire can read, It is the store which exists in fixed distance from the terminal location concerned based on the acquired user positional information and the address information

on said each store. And the program code which the computer for making the store which sells said purchase schedule goods registered search can read, The record medium which has the program code which the computer for giving the guidance notice of the store information to the mobile terminal of the user possession concerned can read when the store which sells purchase schedule goods near the user is searched.

[Claim 13] The goods information which a computer is the record medium which has the program code which can be read, and sells it at each store, The program code which the computer for making the address information on each store match and manage can read, The program code which a computer for a user to make the purchase schedule goods which carry out purchase hope registering can read, The program code which the computer for making the currency information of the mobile terminal which the user possesses acquire can read, The program code which the computer for making the store which sells said purchase schedule goods registered search can read, The program code which the computer for making the distance to each store on the basis of the terminal location concerned compute based on the acquired user positional information and said retrieved address information on each store can read, The program

code which the computer for making the guidance information which added said computed distance information to said each retrieved store information create as a store list for a store comparison can read, The record medium which has the program code which the computer for giving the guidance notice of the created store list to the mobile terminal of the user possession concerned can read.

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#### DETAILED DESCRIPTION

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##### [Detailed Description of the Invention]

###### [0001]

[Field of the Invention] This invention relates to shopping guidance information offer which offers shopping guidance service through a network, and its program documentation medium.

###### [0002]

[Description of the Prior Art] In recent years, in mobile communication system, also besides using for a voice message, use of an electronic mail or the Internet also becomes possible and the opportunity of a cellular-phone terminal to use a

cellular-phone terminal as information communication media has also been increasing. For example, if a cellular-phone terminal is connected to the Internet, the map information on the current position is displayed, or guidance information, such as a store in the area, is displayed, even if it is a going-out place, while being able to peruse various kinds of information, anyone can purchase various kinds of goods easily, or various kinds of services can be received.

[0003]

[Problem(s) to be Solved by the Invention] By the way, immediately, when not purchasing goods using the Internet, but going to a store directly and purchasing, although he will go out for constructing a schedule and buying it if it is goods needed, the goods which do not need to be purchased immediately are purchased in many cases at the time of some occasions. In such a case, with much trouble, even if passed by near the store which sells the goods, he might go past at the time of going out, without noticing it, and may have forgotten at it what to purchase. The technical problem of the 1st invention is enabling it to guide the purport which the goods which the user wishes to have can purchase at a nearby store to the user concerned at the time of going out of a user. It is enabling it to show how much each store which sells the goods which the user

wishes to have at the time of going out of a user has separated the technical problem of the 2nd invention from the current location.

[0004] The means of this invention is as follows. A store information management means for invention (1st invention) of the 1st publication of a claim to match the goods information and the address information on each store which are sold at each store, and to manage, A goods information registration means by which a user registers the purchase schedule goods which carry out purchase hope, The reference-by-location speciality stage which acquires the currency information of the mobile terminal which this user possesses, It is the store which exists in fixed distance from the terminal location concerned based on the user positional information acquired by this reference-by-location speciality stage, and the address information on said each store. And a store retrieval means to search the store which sells the purchase schedule goods registered by said goods information storage means, When the store which sells purchase schedule goods near the user with this store retrieval means is searched, the notice means which gives the guidance notice of that store information to the mobile terminal of the user possession concerned is provided. Moreover, the record medium which recorded the program code for performing

each function mentioned above to a computer, respectively is offered. Therefore, in invention according to claim 1, the purport which the goods which the user wishes to have at the time of going out of a user can purchase at a nearby store can be guided to the user concerned.

[0005] The goods information which sells invention (2nd invention) of the 2nd publication of a claim at each store, A store information management means to match and manage the address information on each store, and a goods information registration means by which a user registers the purchase schedule goods which carry out purchase hope, The reference-by-location speciality stage which acquires the currency information of the mobile terminal which this user possesses, A store retrieval means to search the store which sells the purchase schedule goods registered by said goods information storage means, A distance calculation means to compute the distance to each store on the basis of the terminal location concerned based on the user positional information acquired by said reference-by-location speciality stage, and the address information on each store searched by said store retrieval means, A list creation means to create the guidance information which added the distance information computed according to the store by said distance calculation means to each

store information retrieved by said store retrieval means as a store list for a store comparison, The notice means which gives the guidance notice of the store list created by this list creation means to the mobile terminal of the user possession concerned is provided. Moreover, the record medium which recorded the program code for performing each function mentioned above to a computer, respectively is offered. Therefore, in invention according to claim 2, each store which sells the goods which the user wishes to have at the time of going out of a user can show whether it is how much distant from the present location.

[0006] In addition, the 1st and 2nd invention may be as follows.

(1) When the goods information on the purchase schedule specified as arbitration by said user-terminal side has been transmitted to said information offer equipment from the user terminal concerned, said goods information registration means receives the goods information on this purchase schedule, and carries out registration management according to a user.

(2) As goods information on said purchase schedule, when the goods genre is registered, said store retrieval means searches the store which sells either of said two or more goods contained in the goods genre of the purchase schedule registered.

(3) Said goods information registration means registers two or more purchase schedule goods specified by a user as a shopping list, and said store retrieval means searches the store which sells the purchase schedule goods of either of the shopping lists registered by said goods information registration means for two or more purchase schedule goods of every.

(4) Having said advertising information storage means which carries out the storage management of the advertising information transmitted from the terminal by the side of a store, with the notice of the store information which sells said purchase schedule goods, said notice means also doubles with said advertising information storage means the advertising information on other stores that advertising information is memorized, and gives a guidance notice.

(5) Said notice means gives the guidance notice of the goods information on said purchase schedule currently sold at the store with the store information which sells the purchase schedule goods registered by said goods information storage means.

[0007] (6) In case said user purchases the goods of choice at a store, transmit the privilege service information which shows that preferential treatment sale is possible to the mobile terminal of the user possession concerned.

(7) A selling price acquisition means to acquire the selling price of the goods concerned for every store when the store which sells purchase schedule goods with said store retrieval means is searched. It has a list creation means to create the guidance information which added the selling price according to store acquired with said selling price acquisition means to each store information retrieved by said store retrieval means as list information for a store comparison. Said notice means notifies the list information created by said list creation means.

(8) Having a guidance creation means to create guidance from the current position to each store based on the currency information of the user who acquired by said reference-by-location speciality stage, and the address information on each store searched by said store retrieval means, said notice means also doubles and notifies the guidance information created by said guidance creation means. It has a monitor means to supervise whether the user concerned arrived at the specific location on which it decides beforehand based on the positional information of the terminal of the acquired user possession. in this case, said reference-by-location speciality stage -- \*\* -- When having arrived at the specific location with said monitor means is distinguished, said store retrieval means It is the store which exists in the perimeter of this specific

location, and the store which sells the purchase schedule goods registered by said goods information storage means is searched. Said notice means You may make it transmit each store information retrieved by said store retrieval means with said guidance information to the store.

[0008]

[Embodiment of the Invention] (The 1st operation gestalt) With reference to drawing 1 - drawing 13, the 1st operation gestalt of this invention is explained hereafter. In addition, this operation gestalt shows concretely the 1st and 2nd invention mentioned above. Drawing 1 is the block diagram having shown the whole shopping guidance system-to-offer-information configuration in this operation gestalt. In this shopping guidance system to offer information, while the terminal 3 by the side of each tie-up store (store terminal) is connected through the communication networks 2, such as the Internet, the personal digital assistant 5 by the side of a service user is connected to the information offer equipment 1 by the side of the service contractor who offers this service (shopping management equipment) through each radio base station 4 which constitutes a communication network 2 and a mobile communication network. Here, it has the location specification function to pinpoint a current terminal

location based on the radio-field-intensity information from two or more radio

base stations 4 with the user personal digital assistant 5 near internal organs

GPS (location gaging system) or a its present location.

[0009] In this case, if the goods information which shows each goods under current sale besides the store information which shows the store address of self etc. to each tie-up store side from that store terminal 3, its advertisement, etc. is inputted and it transmits to shopping management equipment 1, shopping management equipment 1 will be made to carry out the storage management of the store information and goods information from each tie-up store. Moreover, if he inputs purchase schedule goods needed into a service user side from the personal digital assistant 3 and it transmits to shopping management equipment 1, shopping management equipment 1 will be made to carry out registration management of the purchase schedule goods from a user according to a user. And shopping management equipment 1 is monitoring continuously the current position of the personal digital assistant 3 which the user possesses, and if the user approaches the store which sells the purchase schedule goods, it will show that to the personal digital assistant 3 concerned, or it will be made to perform shopping guidance service to which it shows the store list in which the distance

to each store which sells the goods concerned on the basis of a user's present location was shown. That is, he guides the purport which the goods which the user wishes to have can purchase at a nearby store to the user concerned, or is trying for each store which sells the goods which a user wishes to have to show whether it is how much distant from the current location at the time of going out of a user.

[0010] Drawing 2 is what showed the database for stores formed in the shopping management equipment 1 side, (A) shows the configuration of the registration store management database 11, and (B) is drawing having shown the configuration of the goods information management database 12. The registration store management database 11 carries out registration management of the store information transmitted from each tie-up store side, and each store record which constitutes this database has each item of a "store name", "an address (address)", "whereabouts position-coordinate information (geographic coordinate information)", and "store ID and password information." "Whereabouts position-coordinate information" is the positional information of a store address, and in case the distance from the current position of the user personal digital assistant 5 to the store concerned is computed, it is referred to.

When "store ID and password information" are accessed from the store terminal 3, it is the information for attesting whether it is a tie-up store. Shopping management equipment 1 is made to carry out additional registration to the registration store management database 11 in the store information, when edit processing which corrects the contents of the registration store management database 11 when correction of store information is directed from the store terminal 3 is performed and store information has been transmitted from the tie-up store of new subscription.

[0011] Each goods record which the goods information management database 12 carries out registration management of the store information transmitted from each tie-up store side, and constitutes this database it has each item of a "handling store name", "a trade name (code)", "a goods genre (goods genre name which shows the classification of goods)", "goods image information", "advertising information (a price, discount, etc.)", "an advertising period (giving a discount -- etc. -- a shelf-life)", "the count of advertising transmission", and "the count of ticket issue." Here, although a "handling store name", "a trade name (code)", a "goods genre", "goods image information", "advertising information (a price, discount, etc.)", and an "advertising period" are store information

transmitted from the tie-up store side, they are a count of total when it transmits to a user and "the count of advertising transmission" shows him to the advertisement of the goods concerned. In addition, in this operation gestalt, it is made to perform advertising rate claim procedure which computes an advertising rate based on "the count of advertising transmission", and is charged to that store. Moreover, in this operation gestalt, although it is made to publish the discount electronic ticket for carrying out preferential treatment sale to the user concerned by the notice of goods guidance at the time of coming to the store to that store when there is an application of goods purchase, "the count of ticket issue" is a count of total which published the discount electronic ticket to quotient assortment. The user personal digital assistant 5 carries out storage maintenance of this discount electronic ticket, and when it does some shopping by going out to that store, he connects to the sales data processor by the side of a store, and he is trying to make a discount electronic ticket for issue of a discount electronic ticket to be what showed the processing which transmits the ticket code information which specified Store ID, the discount rate, etc. to the user personal digital assistant 5 here, and to read and carry out the display output of the discount electronic ticket, or read.

[0012] Drawing 3 is what showed the database for users formed in the shopping management equipment 1 side, (A) shows the configuration of the registered user management database 13, and (B) is drawing having shown the configuration of the shopping list information management database 14. The registered user management database 13 carries out the storage management of that User Information according to the user using this service, and the record according to user which constitutes this database has each item of a "user name", "user ID and password information", "the telephone number of a use personal digital assistant", and "the count of guidance." When "user ID and password information" are accessed from the user personal digital assistant 5, it is the information for attesting whether you are a regular member user. "The count of guidance" shows the count of use total for which was resembled till then and the user concerned used shopping guidance service.

[0013] The shopping list information management database 14 can carry out registration management of the purchase schedule goods from a user according to a user, and the goods record classified by user which constitutes this database can memorize "purchase schedule goods" by two or more items corresponding to a "user name." A user does input assignment of the "trade

name" and a "bar code", when concrete specific goods are decided as a purchase schedule, but when concrete goods are not decided, it is made to carry out input assignment of the "goods genre name" which shows the classification here. In this case, a trade name, and a bar code or a goods genre name is set to the item of "purchase schedule goods." In addition, a trade name, a "clock", and "the handkerchief of "G watch" and "B236"" are goods genre names among drawing.

[0014] Drawing 4 is the block diagram having shown the whole shopping management equipment 1 configuration. CPU101 is arithmetic and program control which controls actuation by this whole shopping management equipment 1 according to the operating system and the various application software in a store 102. The registration store management database 11 mentioned above besides an operating system or various application software, the goods information management database 12, the registered user management database 13, and shopping list information management database 14 grade are stored, and the store 102 has magnetic, optical, the record medium 103 constituted by semiconductor memory etc., and its drive system. This record medium 103 is a medium of portable molds, such as CD-ROM and the floppy

disk with which it can equip free [ the fixed medium or fixed attachment and detachment of a hard disk etc. ], a RAM card, and a magnetic card. Moreover, if needed, it is loaded to RAM (for example, SUTATIKU RAM)104 by control of CPU101, or, as for the program and data in this record medium 103, the data in RAM104 are saved to a record medium 103. Furthermore, the record medium may be formed in the external instrument side, such as a server, and CPU101 can also use them through a transmission medium, carrying out direct access of the program/the data in this record medium.

[0015] Moreover, CPU101 can incorporate the part or all that is stored in a record medium 103 through a transmission medium from other devices side, and new registration or additional registration can also be carried out at a record medium 103. Furthermore, the storage management of a program/the data may be carried out by the external instrument side, such as a server, and CPU101 can also use them through a transmission medium, carrying out direct access of the program/the data by the side of an external instrument. On the other hand, the transmission control section 105 which is the I/O peripheral device, the input section 106, and a display 107 are connected to CPU101 through the bus line, and CPU101 controls those actuation according to a I / O program.

[0016] Next, it explains with reference to the flow chart which shows actuation of the shopping guidance information system in this 1st operation gestalt to drawing 5 - drawing 12. Here, the program for realizing each function described by these flow charts is stored in the record medium 103 with the gestalt of the program code which can be read, and CPU101 performs actuation according to this program code serially. Moreover, CPU101 can also perform serially actuation according to the above-mentioned program code transmitted through a transmission medium. This is the same also in other operation gestalten mentioned later, and can also perform actuation peculiar to this operation gestalt using the program/data by which external supply was carried out through the transmission medium besides a record medium.

[0017] Drawing 5 is the flow chart which showed the goods information registration processing performed between shopping management equipment 1 and the store terminal 3. In addition, when it newly joins as a tie-up store about store information, registration management shall be carried out into the registration store management database 11. First, if a goods information registration demand is transmitted to shopping management equipment 1 with store ID and password information (step A1), shopping management equipment

1 collates store ID and password information with reference to the registration store management database 11, and the store terminal 3 will transmit goods information registration authorization information to the store terminal 3 of the demand origin concerned, when it attests with it being a registration store (step B1). Then, the store terminal 3 will transmit the goods information on each item that it was inputted to shopping management equipment 1 with User ID, if the user input of each item data of "a trade name (code)", a "goods genre", "goods image information", "advertising information", and a an "advertising period" is carried out as information on a registration target product (steps A2-A6) (step A7). If goods information is received, shopping management equipment 1 will create the goods record, and will newly register it to the goods information management database 12 (step B-2).

[0018] Drawing 6 is the flow chart which showed goods information deletion in case the goods newly registered as mentioned above delete the registration by the reasons of a selling halt etc. First, if the store terminal 3 transmits a goods information deletion demand with store ID and password information (step A11), shopping management equipment 1 will transmit goods information deletion authorization information to the demand origin, when it attests with it being a

registration store (step B11). The goods record which shopping management equipment 1 searches the goods information management database 12 based on the goods concerned, and corresponds by this if the store terminal 3 transmits "a trade name (code)" of the inputted deletion target product to shopping management equipment 1 (steps A12 and A13) is deleted (step B12).

[0019] Drawing 7 is the flow chart which showed the registration processing in the case of registering a shopping list between shopping management equipment 1 and the user personal digital assistant 5. First, if the goods information management database 12 transmits a shopping list registration demand to shopping management equipment 1 with user ID and password information (step C1), shopping management equipment 1 will transmit shopping list registration authorization information to the demand origin, when it attests with his being a registered user with reference to the registered user management database 13 (step B21). In this case, although the user personal digital assistant 5 will be in the condition of purchase schedule goods which can be inputted if registration authorization is received As the method of that assignment, it sets in this operation gestalt. the case where goods retrieval is chosen as a result of asking a user whether to input with which the specification

method by there being an approach of searching the goods of choice out of the goods group managed by the shopping management equipment 1 side, and the approach of carrying out a direct input -- the input of the retrieval condition -- waiting (step C2) . Here, when retrieval conditions are inputted, the inputted condition information is transmitted to shopping management equipment 1 (step C3).

[0020] Shopping management equipment 1 searches the goods information management database 12 based on the transmitted retrieval conditions (step B22), and transmits it to the list of 1 corresponding to the condition, or two or more goods information demand-origin (step B23). Then, since the user personal digital assistant 5 receives and carries out the display output of the goods information (step C4), a user can specify the goods of choice as purchase schedule goods out of this goods list. In addition, in not using such goods retrieval, it keys the trade name of purchase schedule goods, a bar code, or a goods genre name directly. Thus, if it is specified out of a goods list or keys directly, the specified trade name, bar code, or goods genre name of purchase schedule goods will be transmitted to shopping management equipment 1 (step C5). If goods information is received, shopping management equipment 1 will

access the record concerned corresponding to a user in the shopping list information management database 14, and will carry out additional registration of the goods information received in the record (step B24).

[0021] Drawing 8 is the flow chart which showed the deletion of the shopping list performed between shopping management equipment 1 and the goods information management database 12. First, if a shopping list deletion demand is transmitted with user ID and password information (step C11), the user personal digital assistant 5 will transmit the shopping list of the users concerned to the demand origin while shopping management equipment 1 transmits shopping list deletion authorization information to the demand origin (step B31), when it attests with his being a registered user (step B32). By it, the user personal digital assistant 5 transmits this goods information number to shopping management equipment 1, when input assignment of the goods information number deleted from the inside of this list display is carried out by this after displaying the transmitted shopping list (step C12) (step C13). Then, shopping management equipment 1 searches the goods which correspond out of the shopping list of the users concerned based on the received goods information number, and deletes the goods information (step B33).

[0022] Drawing 9 and drawing 10 are the flow charts which showed the shopping guidance processing performed by the shopping management equipment 1 side, and show guidance processing of 1 person of users. Drawing 11 is the flow chart which showed the guidance information reception performed by the user personal digital assistant 5 side. Hereafter, according to the informational exchange performed between shopping management equipment 1 and the user personal digital assistant 5, processing actuation of drawing 9 , drawing 10 , and drawing 11 shall be explained in parallel. In addition, the numeric value in drawing and in a round head attaches an informational exchange for convenience. In this case, shopping management equipment 1 performs actuation according to this flow chart, after the shopping list registration processing of drawing 7 (A) mentioned above is completed.

[0023] First, if the shopping list of 1 person of users is acquired from the shopping list information management database 14 (step B41), it distinguishes whether purchase schedule goods are registered in it (step B42) and one goods are not registered, either, guidance processing of the 1 person of the users concerned is ended, but one goods will also acquire the user's currency information, if purchase schedule goods are registered (step B43). In this case,

as mentioned above, it has the location specification function to pinpoint a current terminal location based on the radio-field-intensity information from two or more radio base stations 4 with the user personal digital assistant 5 near internal organs GPS or a its present location, and shopping management equipment 1 calls that terminal, and acquires positional information.

[0024] And it is the store which sells the purchase schedule goods of either of the shopping lists concerned corresponding to a user, and the address searches a store in fixed distance from a user (step B44). That is, registration goods are chosen from the inside of the shopping list of the user, and the goods information management database 12 is searched based on the "goods information." And if there are corresponding goods, all the "handling store names" corresponding to the goods will be extracted. When the store which sells purchase schedule goods by this is searched, the registration store management database 11 is searched based on each of this store information, and the "position-coordinate information" on address correspondence of each store is extracted, respectively. And each extracted store whereabouts positional information is compared with the positional information of the user personal digital assistant 5 acquired at the above-mentioned step B43, and only the store which is carrying out the

whereabouts of the terminal location into fixed distance as a core is sorted out.

And the store nearest to a terminal location is specified as a store for shopping guidance out of each elected store.

[0025] Thus, if the store nearest to a terminal location is specified, shopping management equipment 1 returns to step B41, in order to investigate [ whether it has shown around and ] the store concerned (step B45), and to avoid duplication guidance, if it is guidance ending, but if it has not shown around, goods purchase guidance information will be notified to the user personal digital assistant 5 concerned (steps B46 and B47). That is, while transmitting the notice of the purport which has the store which sells purchase schedule goods in near to the user personal digital assistant 5 concerned, the goods information and store information are also doubled and transmitted (step B46). It can come, simultaneously shopping management equipment 1 chooses the advertising information on the store near the user at random, and transmits it to the user personal digital assistant 5 (step B47). That is, while searching the registration store management database 11 based on a terminal location and pinpointing the store near that location, the goods information management database 12 is searched based on this store information, and advertising information is chosen

from that inside at random. Thus, although the selected advertising information is not the advertisement of purchase schedule goods, it is transmitted to the user personal digital assistant 5 as guidance information on other goods with the notice of guidance of purchase schedule goods.

[0026] In the user personal digital assistant 5 side, reception of each goods purchase guidance information carries out the display output of it (step C21 of drawing 11). Drawing 13 (A) shows the guidance information-display screen in this case, and the "distance" to "store information (store name)" and its store is displayed on a part for the header of this screen with guidance of the purport which has the store which sells purchase schedule goods in near. moreover, the product advertisement information which a list indication of a trade name, a price, discount, the advertising period, etc. was given to the next item field, and was further chosen as mentioned above as the next item field at random with the quotient lot number number as "goods information of choice" -- "-- others -- it is indicated by list as recommended goods information" of a store. Here, if the quotient lot number number within the item is inputted while assignment of detail hope is performed (step C22) in order to know the detailed information of the goods currently displayed on the item of "the goods information of choice", the

quotient lot number number will be transmitted to shopping management equipment 1 (step C23).

[0027] Then, shopping management equipment 1 accesses the goods information management database 12 based on (step B48) and the selected quotient lot number number, when assignment of detail hope is received, and the detailed information containing a goods image is transmitted to a requiring agency (step B49). The user personal digital assistant 5 which received this detailed information carries out the display output of that goods detailed information (step C24). In this case, into this display screen, the carbon button wishing purchase is arranged, and when that carbon button is operated, that is transmitted to shopping management equipment 1 with (step C25) and the purchase rare information that it was inputted (step C26). Shopping management equipment 1 will publish the discount electronic ticket of the goods of choice, if purchase hope is received (step B50) (step B56). That is, the issue code for discount which shows that the goods price is discounted and sold at the time of goods purchase is transmitted to a requiring agency. And after searching the goods information management database 12 based on the goods concerned and updating "the count of ticket issue" of the goods (step B57), the goods of

purchase hope are deleted from the shopping list corresponding to a user (step B58). The user personal digital assistant 5 will carry out storage maintenance of it, if a discount electronic ticket is received (step C27).

[0028] On the other hand, the guidance display which asks whether wish the guidance list of all the commodity registered into the shopping list of the user is also performed, and in wishing the guidance list of all the commodity, it chooses the item (not shown) which shows that as the goods purchase initial screen format (refer to drawing 13 (A)) mentioned above. Then, that is distinguished at step C28, and the user personal digital assistant 5 moves to step C29, and transmits the information wishing guidance to shopping management equipment

1. If shopping list guidance hope is received (step B51), shopping management equipment 1 will perform the guidance information creation processing, and will transmit it to the user personal digital assistant 5 of a requiring agency (step B-52, B53).

[0029] Namely, while searching the store which sells one of the goods, the user correspondence carrying out shopping list access, and choosing one purchase schedule goods registered Based on a user's current position and the whereabouts location of each store, distance sorts the order of a list of a retrieval

store in near order from a user, or the "price" of the goods currently sold at each retrieval store is compared, and the order of a list of a retrieval store is sorted in cheap order (step B-52). Such actuation is performed to all the purchase schedule goods registered into the shopping list corresponding to a user. The store of high order some is extracted out of the retrieval store sorted by this in near order and cheap order for every goods, and while transmitting to the user personal digital assistant 5 by making into shopping list guidance information advertising information which corresponds with the store information (step B53), a user's map information around the current position is read, and it transmits to the user personal digital assistant 5 (step B54).

[0030] The user personal digital assistant 5 receives and carries out the display output of the map information while receiving and carrying out the display output of the shopping list guidance information (step C30) (step C31). Drawing 13 (B) shows this shopping list initial screen format, and is guided corresponding to all purchase schedule goods in order with the store information (store name) near the item for every goods which sells those goods, and cheap order. In this case, distance information and price information are added after each store name.

Drawing 13 (C) shows a map screen and the whereabouts location of each store

is displayed with a store name centering on a user's current position (\*\*).

[0031] And it moves to step B55 and processing which updates the value of "the count of advertising transmission" and "the count of guidance" is performed. Namely, after processing according to detail hope or shopping list guidance hope is performed from a user, this update process Are, are, and when there is also no hope which can creep, while updating "the count of advertising transmission" in the goods information management database 12 corresponding to the goods to which it showed the goods and advertising information that goods purchase guidance which performed and was mentioned above was performed, respectively "The count of guidance" in the registered user management database 13 corresponding to the user is updated.

[0032] Drawing 12 is the flow chart which showed the courtesy-rates calculation processing which shopping management equipment 1 performs for every fixed period. First, shopping management equipment 1 accesses the registration store management database 11, chooses that one store (step B61), accesses the goods information management database 12 based on this selection store, and chooses one goods information corresponding to a selection store (step B62). And ad rates are computed by reading "the count of advertising transmission" of

these goods, and carrying out the multiplication of the "advertising unit price" per advertisement to "the count of advertising transmission" (step B63). Furthermore, ad rates are computed by reading "the count of ticket issue" of the goods, and carrying out the multiplication of the "advertising unit price" per issue to "the count of ticket issue" (step B64). Thus, while adding each ad rates computed at steps B63 and B64 to the quotient assortment advertising total tariff managed corresponding to the selection store concerned and updating a total tariff (step B65), the notice of a claim according to the advertising total tariff after updating is transmitted to the store terminal 3 concerned (step B66).

[0033] Such calculation / claim processing is performed about all the commodity corresponding to a selection store (steps B62-B67). And if the unsettled store still remains (step B68), after the processing termination for one store will choose the next registration store (step B61), and will repeat above-mentioned actuation hereafter. After performing such processing by registration number of shops, courtesy rates are computed by choosing one user from the registered user management database 13 (step B69), reading the "count of guidance", and carrying out the multiplication of the "service unit price" per guidance to "the count of guidance" (step B70). And it investigates whether there are other users

(step B72), and if it is, above-mentioned actuation will be repeated return and the following to step B69. After the courtesy-rates calculation processing classified by user is completed by this, the notice of service billing is performed to the personal digital assistant 5 of each user possession (step B72).

[0034] As mentioned above, it sets in this 1st operation gestalt. Only by a user specifying the goods of his purchase schedule needed, and registering with the shopping management equipment 1 side beforehand, shopping management equipment 1 Since it was made to give the guidance notice of that to the user personal digital assistant 5 when the user approached the store which sells the goods concerned The goods which make an effort for especially a user to be conscious and search for a store, and are expected that there is nothing can be checked in a store, or it can purchase, it becomes possible to prevent a purchase failure effectively, and, moreover, it also becomes possible to use time amount effectively. Moreover, possibility that the customer who is interested in goods also for a store side has you drop in is high, and serves as an effective means on sales promotion.

[0035] Moreover, since the store list in which the distance to each store which sells the goods on the basis of the present location of the user personal digital

assistant 5 was shown was notified as shopping list guidance, a user becomes possible [ choosing one of stores from the inside ] with reference to the distance information. For example, it becomes possible to choose the store from a its present location, even if there is some distance if convenience is good for the direction of other stores dropping in on the way even if it is the nearest store, and it becomes possible to choose by decision of one.

[0036] Since it will be searched and shown to a user to the store which sells either of two or more goods contained in this goods genre that what is necessary is just to register purchase schedule goods if that goods genre is registered even if it does not register a concrete trade name or a concrete bar code while he can leave subsequent management to the shopping management equipment 1 side, he becomes possible [ choosing a desired store out of each store which sells similar goods ]. Shopping management equipment 1 registers two or more purchase schedule goods specified by a user as a shopping list, since the store which sells the purchase schedule goods of either of this shopping list was searched, even when there are two or more purchase schedule goods, the notice of guidance to each goods can be received, and quotient number of articles can prevent [ equipment ] a shopping failure effectively in many.

[0037] With moreover, the notice about the store which shopping management equipment 1 carries out the storage management of the advertising information transmitted from the store terminal 3, and sells purchase schedule goods Since the advertising information on other stores is also doubled and it was made to notify, for example for a user By performing the advertisement advertisement which used as the target the shopper who is in near with much trouble, even if it can know in advance what kind of other goods he can buy the occasion with which he buys goods needed and is not the goods for the purpose of purchase for an advertiser side Possibility of advertizing discount etc. and having it drop in specially can be raised, and it becomes what that gains a new customer is effective as a means.

[0038] Since the goods information on said purchase schedule currently sold at the store corresponding to the store information which sells purchase schedule goods was notified according to the store, in a purchase schedule of two or more goods, a user can judge easily what he should buy where. Moreover, since the discount electronic ticket was transmitted to the user personal digital assistant 5 concerned as privilege service information which shows that preferential treatment sale is possible when a user purchased the goods of choice at a store,

it not only shows a selling store, but it becomes possible to increase a visitor's purchase volition. Moreover, since the guidance information which added the selling price of the goods to each store information is created as list information for a store comparison and was notified when the store which sells purchase schedule goods was searched, a user becomes possible [ choosing the store which can be bought at a low price out of it with reference to the selling price ], and can get the merit by price competition. Moreover, since guidance from a user's current position to each store is created and it was made to notify, fine guidance service is attained.

[0039] (The 2nd operation gestalt) The 2nd operation gestalt of this invention is hereafter explained with reference to drawing 14 and drawing 15. In addition, when a user arrives at the specific location (station of a means of transportation) on which it decides beforehand, this 2nd operation gestalt is a store which makes this station a nearby station, and searches the store which sells purchase schedule goods, and notifies the guidance information to each store with each of that store information. Here, in both the operation gestalt, the same thing shall attach and show the same sign fundamentally, and the explanation shall be omitted, and also it shall explain focusing on the description part of the 2nd

operation gestalt hereafter.

[0040] Drawing 14 is drawing having shown the contents of the nearby station information management table 15 prepared in the shopping management equipment 1 side. In the case of the store besides that "store name"/"a name of the station" and "address information and position-coordinate information", this nearby station information management table 15 has become for every store and every station with the configuration which carries out the storage management of that the "nearby station." That is, each station information on a means of transportation besides the information on a registration store also has composition which carries out a storage management. Drawing 15 is the flow chart which showed the shopping guidance processing in this 2nd operation gestalt, and shows guidance processing of 1 person of users.

[0041] First, while acquiring the shopping list of 1 person of users from the shopping list information management database 14 (step B81), a user's currency information is acquired (step B82). And based on this currency information, the nearby station information management table 15 is searched (step B83), and it is confirmed whether the user reached one of stations (step B84). Here, if it does not arrive at a station, it returns to step B82, but when a user arrives at the

station, each store which accesses the shopping list of the user, and sells one of the goods, and makes the station concerned a nearby station is searched in nearness and low price order (step B85).

[0042] Namely, while searching the goods information management database 12 based on the goods registered into the shopping list of the user and extracting all the "handling store names" corresponding to the goods After sorting out each store which makes a "nearby station" the name of the station in which a user is with reference to the nearby station information management table 15, it sorts in "nearness order" and "low price order" like the 1st operation gestalt which mentioned each store information above. Such actuation is performed for each [ which is registered into the shopping list of the users concerned ] goods of every. And the store information on high order some retrieved for every goods is chosen, and it transmits as shopping list guidance information to the user personal digital assistant 5 concerned with the advertising information (step B86). Moreover, the map information around a station which specified a user location and each store location is created, and it transmits to the user personal digital assistant 5 (step B87).

[0043] As mentioned above, it sets in this 2nd operation gestalt. When a user

arrives at the station, are the store which makes this station a nearby station, and the store which sells purchase schedule goods is searched. Since the guidance information to each store was notified and was carried out with each of that store information, when it arrives at the station, it can know what he can buy where, and the goods of choice can be bought efficiently, without walking vainly and turning.

[0044] In addition, although the goods information on its purchase schedule needed is inputted from the user personal digital assistant 5 and it was made to transmit to the shopping management equipment 1 side, the goods information on a purchase schedule is inputted and you may make it register it from the computer apparatus of a house in each operation gestalt. Moreover, although the user was asked for the charge of service use, the service charge is made into no charge, and you may make it ask an advertiser for the price in each operation gestalt mentioned above to the user who looked at the advertisement by the side of a store.

[0045]

[Effect of the Invention] Since the purport which the goods which the user wishes to have can purchase at a nearby store was guided to the user concerned at the

time of going out of a user according to the 1st invention, if a user has A user does input assignment of the goods of his purchase schedule needed beforehand, and are good as it registers with the shopping management equipment 1 side. The goods which make an effort for especially a user to be conscious and search for a store, and are expected that there is nothing can be checked in a store, or it can purchase, and it becomes possible to prevent a purchase failure effectively. Also for a store side Possibility that an interested customer has goods drop in is high, and serves as an effective means on sales promotion. Since the store list in which the distance to each store which sells the goods on the basis of a user's present location was shown was notified according to the 2nd invention It can check whether each store which sells the goods which the user wishes to have at the time of going out of a user is how much distant from the present location. By this for example If convenience is good for the direction of other stores dropping in on the way even if somewhat further from a its present location than the nearest store, it will become possible to choose the store.

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## DESCRIPTION OF DRAWINGS

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### [Brief Description of the Drawings]

[Drawing 1] The block diagram having shown the whole shopping guidance system-to-offer-information configuration.

[Drawing 2] (A) is drawing in which the configuration of the registration store management database 11 was shown, and (B) showed the configuration of the goods information management database 12.

[Drawing 3] (A) is drawing in which the configuration of the registered user management database 13 was shown, and (B) showed the configuration of the shopping list information management database 14.

[Drawing 4] The block diagram having shown the whole shopping management equipment 1 configuration.

[Drawing 5] It is the flow chart with which the goods information registration processing performed between shopping management equipment 1 and the store terminal 3 was shown, (A) showed the goods information registration processing by the side of the store terminal 3, and (B) showed the goods information registration processing by the side of shopping management

equipment 1.

[Drawing 6] It is the flow chart with which the goods information deletion in the case of deleting registration of the goods information newly registered between shopping management equipment 1 and the store terminal 3 was shown, (A) showed the goods information deletion by the side of the store terminal 3, and (B) showed the goods information deletion by the side of shopping management equipment 1.

[Drawing 7] It is the flow chart with which the registration processing in the case of registering a shopping list between shopping management equipment 1 and the user personal digital assistant 5 was shown, (A) showed the shopping list registration processing by the side of the user personal digital assistant 5, and (B) showed the shopping list registration processing by the side of shopping management equipment 1.

[Drawing 8] It is the flow chart with which the deletion of the shopping list performed between shopping management equipment 1 and the goods information management database 12 was shown, (A) showed the shopping list deletion processing by the side of the user personal digital assistant 5, and (B) showed the shopping list deletion processing by the side of shopping

management equipment 1.

[Drawing 9] The flow chart which showed the shopping guidance processing of 1 person of users performed by the shopping management equipment 1 side.

[Drawing 10] The flow chart which showed the shopping guidance processing of 1 person of users following drawing 9 performed by the shopping management equipment 1 side.

[Drawing 11] The flow chart which showed the guidance information reception performed by the user personal digital assistant 5 side.

[Drawing 12] The flow chart which showed the courtesy-rates calculation processing which shopping management equipment 1 performs for every fixed period.

[Drawing 13] (A) is drawing in which (B) showed the shopping list initial screen format, and (C) showed the map screen by showing a guidance information-display screen.

[Drawing 14] Drawing having shown the contents of the nearby station information management table 15 in the 2nd operation gestalt.

[Drawing 15] The flow chart which showed the shopping guidance processing in the 2nd operation gestalt.

**[Description of Notations]**

**1 Shopping Management Equipment**

**2 Communication Network**

**3 Store Terminal**

**4 Radio Base Station**

**5 User Personal Digital Assistant**

**11 Registration Store Management Database**

**12 Goods Information Management Database**

**13 Registered User Management Database**

**14 Shopping List Information Management Database**

**15 Nearby Station Information Management Table**

**101 CPU**

**102 Storage**

**103 Record Medium**

**105 Transmission Control Section**